

In re Patent Application of:
HILL ET AL.
Serial No. 10/761,409
Filed: 01/22/2004

REMARKS

Claims 1 to 56 are currently pending. Applicant hereby elects invention I, thereby maintaining claims 1 to 31 and 56, while canceling claims 32 to 55.

Claim 1 has been amended to eliminate the preferred amount of nanocrystals from the independent claim to ensure Applicant's protection is not unduly restricted.

The Abstract, paragraph 26 of the description, and claims 11 and 12 have been amended to correct a typographical error, in which the nanocrystals, instead of the semiconductor material, were mistakenly identified as 30 to 50 atomic percent of the doped semiconductor nanocrystal layer. A person skilled in the art would immediately realize that the defined concentration, i.e. 30 to 50 atomic percent, is related to the total amount of semiconductor material in the doped semiconductor nanocrystal layer, i.e. making up both the nanocrystals and the semiconductor oxide layer. In particular, in view of the teachings of J. Sin, M Kim, S Seo and C. Lee in Applied Physics Letters, (1998), Volume 72, 9, pgs 1092 to 1094, which is incorporated by reference into the present application. The reference clearly states that the atomic ratio of silicon to oxygen is 1:2 to 2:1. Moreover, the "preferred", "more preferred" and "most preferred" percentages disclosed in the present invention are identical to the ratios investigated in the Sin et al reference. Furthermore, paragraph 0059 of the present application discloses that the ratio of group IV element precursor to

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oxygen can be selected to be from 3:1 to 1:2, and the ratio of flow rates of the group IV element precursor and of oxygen can be kept, for example, between 2:1 and 1:2.

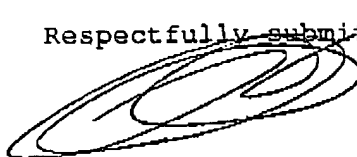
The title and the preamble of the description have been amended in accordance with the amendments to the claims.

As such, it is respectfully submitted that all of the claims remaining in the application are in condition for allowance. Early and favorable consideration would be appreciated.

Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 50-1465 and please credit any excess fees to such deposit account.

Respectfully submitted,



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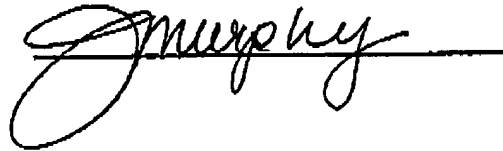
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CERTIFICATE OF FACSIMILE TRANSMISSION

I HEREBY CERTIFY that the foregoing correspondence has been forwarded via facsimile number 571-273-8300 to MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, this 11 day of October 2005.

A handwritten signature in cursive script, appearing to read "Murphy", is written over a horizontal line.